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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|----------------------------|----------------------|------------------------------|------------------|
| 10/573,731 | 03/27/2006 | Martin Dottling | 071308.1010 (2003P11446WO | 2258 |
| 31625 BAKER BOTT | 7590 01/28/200 S L.L.P. | EXAMINER | | |
| PATENT DEPA | ARTMENT | ZEWDU, MELESS NMN | | |
| 98 SAN JACINTO BLVD., SUITE 1500 AUSTIN, TX 78701-4039 | | 000 | ART UNIT | PAPER NUMBER |
| , | | | 2617 | |
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| | | | MAIL DATE | DELIVERY MODE |
| | | | 01/28/2009 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | | |
|--|---|-------------------------------|--|--|--|--|
| Office Action Comments | 10/573,731 | DOTTLING ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Meless N. Zewdu | 2617 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on | | | | | | |
| | -· action is non-final. | | | | | |
| , | ·— | | | | | |
| | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| | | 3 3. 3 . 2 . 3. | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>23-44</u> is/are pending in the application | ı. | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>23-44</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
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| , | • | | | | | |
| Application Papers | | | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | | |
| 10)⊠ The drawing(s) filed on <u>27 <i>March</i> 2006</u> is/are: a) accepted or b)⊠ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a)⊠ All b)□ Some * c)□ None of: | | | | | | |
| | 1. Certified copies of the priority documents have been received. | | | | | |
| Certified copies of the priority documents | 2. Certified copies of the priority documents have been received in Application No | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
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| | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) | | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date | | | | | | |
| 3) Information Disclosure Statement(s) (PTO/SB/08) 5) Information Disclosure Statement(s) (PTO/SB/08) | | | | | | |
| Paper No(s)/Mail Date <u>3/27/06</u> . 6) Other: | | | | | | |

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DETAILED ACTION

1. This action is the first on the merit of the instant application.

2. Claims 1-22 were cancelled in a preliminary amendment.

3. Claims 23-44 are pending in this action.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 3/27/06 has been considered except one entry for which the document was presented without date (see crossed-out document.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the 'mobile device' and the 'base station' must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure

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is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Method for Transmitting Control Data between a Base Station and a Mobile Station.

Claim Objections

Claims 23 and 41-44 are objected to because of the following informalities: the claims recite multiple acronyms/symbols in brackets (e.g., control parameters (KN, PN, RV) without providing for what these acronym/symbol/s stand. It is required that the

function/s and/or step/s or feature/s be mentioned at least one time and thereafter use acronym/s or symbol/s. In other words, each of the control parameters represented by KN, PN, RV) should be pointed out at least one first time.

Claims 23 and 41-44 are objected to because of the following informalities: each of these claims recite --- control parameter (KN, RV). It should be control parameters or there should be one control parameter. Appropriate correction is required.

Claims 24-26, 31, 36 and 38-40, (see claim 24, on line 6; claim 25, on line 3; claim 26, on line 5; claim 31, on line 3; claim 36, on line 2; claim 38, on line 2; claim 39, on line 2; claim 40, on line 2) are objected to because of the following informalities: each of these claims recites --- the time channel (k1, ---, k6) or time channel (K1, k2, K3), thereby mixing a singular feature (time channel) with plural features (K1, ---, K6) or (K1, K2, K3). Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 23 and 41-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 23 recites – a further control parameter (KN, RV) (see on lines 7-8). The parameters have been already provided/mentioned, thus are not – a further control parameter. The feature, "a further control parameter"

implies the introduction of a new control parameter, which has not been mentioned thus far. A similar problem exists also in claims 41-44 (see last lines in each of these claims). Appropriate correction is required.

Claim 44 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. On line 3, the feature, "from a base station to the mobile station" is confusing. It appears the base station receives from itself.

Claim 26 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims recites a feature, "so many different time channels" (see on line 2), which is indefinite. Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 23 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claim is directed to a method/process that is not tied to another statutory subject matter (e.g., apparatus, system or entity) for performing the steps therein or for transforming the/an underlying subject matter into another, as required by the May 15 memorandum, issued by the Deputy Commissioner for Patents, Love John J. Such a purely method/process claim is considered as a mere mental

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process and does not qualify the 35 U.S.C. 101 requirements, thus rejected as a non-statutory subject matter. To put it differently and in a question form, what performs the steps provided in claim 23? Although a mobile station and a base station are mentioned in the claim, these devices are shown as performing the steps in question. Nor, the steps in question are inherent within the base station and/or the mobile station since there are other intermediate devices between a mobile station and a base station (e.g., BSC and MSC).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 23-25, 27-30, 32, 35 and 41-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (APA) in view of Winga HO (GB 2 350 984 A).

As per claim 23: the APA discloses about a method for transmitting control parameters (KN, PN, RV) on a physical channel (PK) between a mobile radio device and a base station in a cellular network (see spec. paragraph 0002), comprising:

including with the control parameters (KN, PN, RV) a packet number (PN) for identifying a data packet (see spec. paragraph 0009, lines 1-3); and

wherein the control parameters (KN, PN, PV) are used for controlling a packet-

oriented data transmission between the mobile radio device and the base station (see spec. paragraph 0007). But, the APA does not explicitly teach about source coding the packet number (PN) at least together with a further control parameter (KN, RV) for the transmission, as claimed. However, in the same field of endeavor, Ho teaches about transmitting the encoded packet data to said receiving digital system as a packet including a header having a packet number and a tag identifying the encoding information used to encode the packet (see page 2, lines 6-32, particularly lines 1618). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teaching provided by APA with that of Ho for the advantage of conditioning an encoder information to rebuild a new encoder information without the lost packet data when a packet is lost (see page 2, lines 28-29).

As per claim 24: the APA teaches a method, further comprising:

implementing by a temporal distribution of the same physical channel (PK), a plurality of different time channels (K1, ..., K6) available for sending data packets (see spec. paragraphs 0003, 0004-0005); and

re-transmitting a data packets on a time channel (K1, ..., K6) using a transmitting device in each instance, until the transmitting device receives a confirmation signal (ACK) from a receiving device (see spec. paragraph 0007).

As per claim 25: the APA teaches about a method, further comprising including with at least one further control parameter (KN), the channel number (KN) of the time channel (K1, ..., K6), in which the data packet in question is sent (see spec paragraph 0009).

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As per claim 27: the APA teaches about a method, wherein a number of re-transmissions of a data packet are superimposed to decode a data packet see spec. paragraph 0011).

As per claim 28: the APA teaches about a method, wherein an incremental redundancy method is used during the data transmission and a least one further control parameter (RV) includes a redundancy version indicator (RV) (see spec. paragraphs 0007-0008).

NDI of the APA can be considered as a RV.

As per claim 29: the APA teaches about a method, wherein the data transmission takes place by means of a multi-channel HARQ transmission method (KN, PN, RV) and at least one further control parameter includes an HARQ parameter.(see spec. paragraphs 0005-0006, 0013).

As per claim 30: the APA teaches about a method, wherein different numbers of packet numbers (Pi) are assigned to different time channels (K1, ---, K6), which are available for identifying a data packet on the time channel (K1, ---, K6) in question (see spec. paragraph 0004).

As per claim 32: the APA teaches about a method, wherein the number of packet numbers (Pi) and/or number of redundancy version indicators (RV) of at least one of the time channels (K1, ..., K6) is/are variable (question (see spec. paragraph 0008).

As per claim 35: the APA teaches about a method, wherein transmission resources are allocated to a specific transmitting device taking into account the number of time channels (K1, ..., K6) used by the device in question and/or the numbers of packet numbers (Pi) and/or numbers (Nrv) of the redundancy version indicators (RV) of the

different time channels (K1, ..., K6) of the device in question (see spec . paragraph 0004)..

As per claim 41: the features of claim 41 are similar to the features of claim 23, except claim 41 is directed to an apparatus (a mobile radio device) which is required/intended to perform the steps of claim 23. Hence, since the apparatus is required to perform the steps in question (which are obviated by the prior art of record), claim 41 is rejected on the same ground and motivation as claim 23.

As per claim 42: the features of claim 42 are similar to the features of claim 23, except claim 42 is directed to an apparatus (base station) which is required/intended to perform the steps of claim 23. Hence, since the apparatus is required to perform the steps in question (which are obviated by the prior art of record), claim 42 is rejected on the same ground and motivation as claim 23.

As per claim 43: the features of claim 43 are similar to the features of claim 23, except claim 43 is directed to an apparatus (a mobile radio device) which is required/intended to perform the steps of claim 23. Hence, since the apparatus is required to perform the steps in question (which are obviated by the prior art of record), claim 43 is rejected on the same ground and motivation as claim 23.

As per claim 44: the features of claim 44 are similar to the features of claim 23, except claim 44 is directed to an apparatus (base station) which is required/intended to perform the steps of claim 23. Hence, since the apparatus is required to perform the steps in question (which are obviated by the prior art of record), claim 44 is rejected on the same ground and motivation as claim 23.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meless N. Zewdu whose telephone number is (571) 272-7873. The examiner can normally be reached on 8:30 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bost Dwayne D can be reached on (571) 272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Any inquiry of a general nature relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

/Meless N Zewdu/ Primary Examiner, Art Unit 2617 1/28/2009

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